

**In the Claims:**

1. (Previously Presented) An electric device with a body having a resistor comprising a phase change material being changeable between a first phase and a second phase via crystallization initiating at an interface between crystalline and amorphous materials, the resistor having an electric resistance which depends on whether the phase change material is in the first phase or the second phase, the resistor being able to conduct a current for enabling a transition from the first phase to the second phase, the phase change material being a fast growth material.
2. (Previously Presented) An electric device as claimed in Claim 1, wherein the phase change material has a crystallization speed of at least 1 m/s.
3. (Previously Presented) An electric device as claimed in Claim 1, wherein the phase change material is a composition of formula  $Sb_{1-c}M_c$ , with  $c$  satisfying  $0.05 \leq c \leq 0.61$ , and  $M$  being one or more elements selected from the group of Ge, In, Ag, Ga, Te, Zn and Sn.
4. (Previously Presented) An electric device as claimed in Claim 3, wherein  $c$  satisfies  $0.05 \leq c \leq 0.5$ .
5. (Previously Presented) An electric device as claimed in Claim 4, wherein  $c$  satisfies  $0.10 \leq c \leq 0.5$ .
6. (Previously Presented) An electric device as claimed in Claim 1, wherein the phase change material is substantially free of Te.
7. (Previously Presented) An electric device as claimed in Claim 3, wherein the phase change material comprises Ge or Ga in concentrations which range in total between 5 and 35 atomic percent.
8. (Previously Presented) An electric device as claimed in Claim 3, wherein the phase change material comprises In or Sn in concentrations which range in total between 5 and

30 atomic percent.

9. (Previously Presented) An electric device as claimed in Claim 1, wherein the phase change material is a composition of formula  $Sb_aTe_bX_{100-(a+b)}$ , with a, b and 100-(a+b) denoting atomic percentages satisfying  $1 \leq a/b \leq 8$  and  $4 \leq 100-(a+b) \leq 22$ , and X being one or more elements selected from the group of Ge, In, Ag, Ga, Zn and Sn.

10. (Previously Presented) An electric device as claimed in Claim 9, wherein the phase change material comprises at least 10 % and less than 22 % Ge.

11. (Previously Presented) An electric device as claimed in Claim 9, wherein the resistor has a first contact area and a second contact area, the first contact area being smaller than or equal to the second contact area, the first contact area having a characteristic surface area dimension d (in nm), d being larger than  $6 \cdot a/b$ .

Claims 12- 16 (Cancelled)

17. (Previously Presented) The device of claim 1, wherein the phase change material is responsive to current by changing from an amorphous state to a crystalline state by way of a fast growth crystallization mechanism that is substantially devoid of nucleation.

18. (Previously Presented) An electric device comprising:

    a crystallization layer;  
    a fast growth phase change material on the crystallization layer and being changeable from an amorphous phase to a crystallization phase in response to an electrical pulse, by crystallization initiating at an interface with the crystallization layer;  
    and

    a resistor including the fast growth phase change material and having an electric resistance that depends on the phase of the phase change material.

19. (Previously Presented) The device of claim 18, wherein the fast growth phase change material changes from an amorphous phase to a crystallization phase in response to a single electrical pulse.

20. (Previously Presented) The device of claim 18, wherein the fast growth phase change material is responsive to an electrical pulse by crystallizing without nucleation.

21. (Previously Presented) The device of claim 18, wherein the fast growth phase change material crystallizes at a rate of at least about 1m/s in response to an electrical pulse.

22. (Previously Presented) The device of claim 18, wherein the fast growth phase change material is responsive to an electrical pulse by crystallizing to change the electrical resistance of the resistor in less than about 20 nanoseconds.